

CLAIMS

1. A method of producing metal or metal alloy granules, characterized in that it comprises the steps consisting in:

- 5 • preparing a metal or a metal alloy having non-metallic inclusions essentially comprising oxides of the base metal;
- pelletizing the metal or the alloy with a reducing agent in order to form the granules;
- 10 • processing the granules in a vacuum so that the reducing agent reacts on the inclusions; and
- eliminating a surface layer from the granules.

15 2. A method according to claim 1, characterized in that elimination comprises abrasion.

3. A method according to claim 1 or claim 2, characterized in that it includes tribofinishing.

20 4. A method according to any one of claims 1 to 3, characterized in that elimination is performed by means of a vibrating enclosure.

25 5. A method according to any one of claims 1 to 4, characterized in that the thickness of the eliminated layer lies in the range 0.1 mm to 0.5 mm.

30 6. A method according to any one of claims 1 to 5, characterized in that the metal is selected from chromium, titanium, vanadium, molybdenum, manganese, niobium, tungsten, and nickel, and the alloy comprises at least one of the above metals and/or boron.

35 7. A method according to any one of claims 1 to 5, characterized in that the alloy is a ferro-alloy.

8. A method according to any one of claims 1 to 7, characterized in that the preparation step makes use of an aluminothermic reaction between at least one metal oxide and divided aluminum.

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9. A method according to claim 8, characterized in that the reaction is unbalanced due to a shortage of aluminum relative to the quantity of aluminum needed for a complete reaction so as to ensure that the metal or the alloy contains reducible non-metallic inclusions mainly constituted by inclusions of the oxide of the base metal.

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10. A method according to any one of claims 1 to 9, characterized in that after pelletizing, the granules are baked, in particular at a temperature lying in the range 200°C to 230°C.

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11. A method according to any one of claims 1 to 10, characterized in that the reducing treatment is performed in a vacuum oven.

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12. A method according to any one of claims 1 to 11, characterized in that after the reducing treatment, the product is cooled in a neutral atmosphere.